In the claims:

Please amend the claims as follows:

Claims 1-8 were canceled.

(Previously Added) 9. A method for removal of contaminants in a soil formation comprises:

supplying ambient air and ozone at concentrations to effect removal of the contaminants;

producing microbubbles containing the ambient air and ozone at concentrations to effect removal of contaminants; and

introducing the microbubbles containing the ambient air and ozone at concentrations to effect removal of contaminants into the soil formation under conditions that contaminants in a dissolved state in the soil formation are pulled out of the soil formation through the microbubbles and are provided in a vapor state within the microbubbles to react with the ozone contained in the microbubbles in accordance with Henry's law.

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(Previously Added) 10. The method of claim 9 wherein the microbubbles are sized in accordance with a porosity characteristic of the soil formation.

(Previously Added) 11. The method of claim 9 wherein introducing further comprises:

providing a plurality of injection wells to introduce the microbubbles containing the ambient air and ozone.

(Previously Added) 12. The method of claim 11 wherein introducing further comprises:

using a plurality of microporous diffusers in the plurality of injection wells to introduce the microbubbles containing the ambient air and ozone.

(Currently Amended) 13. The method of claim 9 wherein the soil formation has

contaminants, and with the contaminants having ~~with~~ a Henry's constant in the order of about 2.59×10^{-2} to 4.48×10^{-5}.

(Previously Added) 14. The method of claim 9 wherein contaminants in the soil formation are decomposed by ozone interaction in the bubbles with the contaminants.

(Previously Added) 15. The method of claim 9 wherein the fine bubbles have an initial bubble size at least between about 5 to 200 microns.

(Previously Added) 16. A method for removal of contaminants in a soil formation comprises:

providing a plurality of injection wells and introducing ambient air and ozone as microbubbles through the injection wells by using a corresponding micro-porous diffuser for each one of the plurality of injection wells;

surrounding the micro-porous diffusers with a sand pack disposed between the micro-porous diffusers and the surrounding soil formation; and

introducing ambient air and ozone as microbubbles by using micro-porous diffusers in the injection wells under conditions that moist soils promote contaminants that exist in a dissolved state in the soil formation to be pulled out of the soil formation through membranes of the microbubbles and react in a vapor state within the microbubbles with the ozone contained in the microbubbles.

(Previously Added) 17. The method of claim 16 wherein the microbubbles increase the lifetime of ozone in the soil formation.

(Previously Added) 18. The method of claim 16 wherein removal of contaminants can occur without a vapor extraction.

(Previously Added) 19. The method of claim 16 further comprising pulsing a water phase to provide steady upward migration of the micro-fine bubbles through the soil formation.

(Previously Added) 20. The method of claim 16 wherein the soil formation contains chlorinated hydrocarbons.

(Previously Added) 21. The method of claim 16 wherein the soil formation contains chlorinated ethenes.

(Previously Added) 22. The method of claim 16 wherein the contaminants include chlorinated ethenes including dichloroethene, trichloroethene, and/or tetrachloroethene.

(Previously Added) 23. The method of claim 16 wherein the micro-porous diffusers have a pore size between about 5 to 200 microns to provide the fine bubbles.

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(Previously Added) 24. The method of claim 16 wherein the micro-porous diffusers have a pore size selected to match a porosity characteristic of the surrounding soil formation.

(Previously Added) 25. The method of claim 16 wherein the micro-porous diffusers have a pore size selected to match a porosity characteristic and a permeability characteristic of the surrounding soil formation.

Please add new claims 26-36.

26. A process for removing contaminants, said process comprising:

injecting gas including an oxidizing gas into a site, the gas injected as bubbles that travel through a soil formation in the site, the bubbles having an initial bubble diameter in a range of about 5 to 200 microns, the bubbles promoting pulling of contaminants into the bubbles and to decompose the contaminants in a reaction with the gas in the bubbles in the presence of water.

27. The process of claim 26 further comprising:

enhancing decomposition of the contaminants by carrying out the reaction in the presence of a reaction promoter.

28. The process of claim 26 wherein the bubbles of oxidizing gas include oxygen and ozone.

29. The process of claim 26 wherein the bubbles are produced by using a microporous diffuser that has a porosity characteristic matched to soil conditions on the site and fluid acceptance range to avoid fracturing of the substrate structure.

30. The process of claim 26 wherein the bubbles of oxidizing gas include ozone, and the bubbles extract volatile dissolved tetrachloroethene, trichloroethene, and/or dichloroethene while ozone in the bubbles decomposes the tetrachloroethene, trichloroethene, and/or dichloroethene.

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31. The process of claim 26 wherein contaminants are dissolved chlorinated hydrocarbons and/or dissolved hydrocarbon products.

32. The process of claim 26 wherein the bubbles contain a mixture of air and ozone to decompose the contaminants; further comprising varying respective concentrations of oxygen and ozone to effect the rate of decomposition.

33. The process of claim 26 wherein injecting occurs by delivering the gas under pressure through a microporous diffuser device that is disposed into the site.

34. The process of claim 26 wherein injecting occurs by delivering the gas under pressure through a microporous diffuser device that is disposed in a well that is provided in the site.

35. The process of claim 26 wherein injecting occurs by delivering the gas under pressure through a microporous diffuser device that is injected into the site.

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36. The process of claim 26 wherein injecting occurs by delivering the gas under pressure through a microporous diffuser device that is disposed into an underground aquifer that is under the site.